Nova No. 19 is 180″ south and 10″ east of the nucleus. Its magnitude was estimated as follows:

DATE	MAG.	PLATE BY
1920, Dec. 10	16.3	Duncan (two plates)
Dec. 12	16.6	Duncan (two plates)
Dec. 17	17.5	Humason
1921, Jan. 4-8	19±	Duncan (five plates)

Nova No. 20 is 100″ north and 140″ east of the nucleus. Following are estimates of its magnitude:

DATE	MAG.	PLATE BY
1920, Dec. 10	17.7	Duncan (two plates)
Dec. 17	17.8	Humason
1921, Jan. 4	18.0	Duncan (two plates)
Jan. 5	17.8	Duncan
Jan. 8	17.8	Duncan (two plates)

Neither No. 19 nor No. 20 appears on a plate made by Mr. Humason on 1920 December 7, which shows stars down to magnitude 17.6.

Mr. Humason has called my attention to the fact that Nova No. 15, discovered by me in July, 1919, was still visible as late as December of that year. I estimate its magnitude on September 21, 1919, as 17.7. On plates of December 18 and 21, 1919, its image appears somewhat nebulous, and is fainter than the 18th magnitude. These three plates were taken by Dr. Shapley.

JOHN C. DUNCAN.

SUMMARY OF MOUNT WILSON MAGNETIC OBSERVATIONS OF SUNSPOTS FOR NOVEMBER AND DECEMBER, 1920

The increase of spot activity in October did not continue. November, like August and September, had few spots; but No. 1767 which crossed the central meridian early in November, was one of the large groups of the year.

There were no calcium spectroheliograms from December 22 to December 25, inclusive, so that there is some uncertainty in the classification of unipolar spots on those days. No. 1782 was clearly in the following part of the surrounding faculae and was doubtless *af*. No. 1785 was too near the meridian on December 24, 25, 26 for the faculae to show, but probably it was *ap* on those days, as on the preceding and following days.

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR NOVEMBER, 1920

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1766	Nov. 4.4	+11	15	x	βp	αp	αp											
1767	5.4	−11	30	βp	βp	βp	βp				x	βp	βp					
1768	3.4	+14	x		x													
1769	5.7	+10	5								x	β	αp					
1770	9.0	+ 1	9												αp	βp	αp	
1771	20.3	+18	27														α	
				2	3	2	2	.....	.....	.....	2	2	2	.....	1	1	2	.....

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1771	Nov. 20.3	+18	27	αp	αp	αp	αp	βp	αp	αp	αp	αp	αp	x				
1772	12.7	−12	x	x														
1773	20.1	−15	2					α										
1774	27.8	−11	19							αp	βp	βp	$\beta\gamma$	$\beta\gamma$	x	x	x	x
1775	29.1	−12	16								αp	βp	βp	$\beta\gamma$	x	x	αp	
1776	20.1	−14	14									βf	αf	x				
1777	Dec. 1.8	− 9	28											x	αp	αp	αp	x
				2	1	1	1	2	1	2	3	4	4	5	3	3	3	2

NOTES.

No. 1766 Possibly a return of No. 1753.

No. 1767 A large typical bipolar group.

No. 1771 A return of No. 1761. A stable spot near the center of a bright calcium region. Following, but detached from it, was a region of calcium flocculi in which a small negative spot appeared on Nov. 20. It was on account of this region that the group was generally classified as αp instead of α.

No. 1774 On Nov. 25 and 26 this group was a double bipolar, the polarity distribution was negative, positive, negative, positive.

No. 1775 On Nov. 26 there was a small positive spot south and a little preceding the main negative spot. The calcium flocculi surrounding No. 1774 merged with that around No. 1775, so that on Nov. 29, No. 1775, altho in the following part of the total disturbed area was in the preceding part of the flocculi immediately surrounding it.

No. 1776 A revival of No. 1773. Calcium flocculi were constantly present in this region.

No. 1777 A return of No. 1767.

MAGNETIC CLASSIFICATION OF SUN-SPOTS FOR DECEMBER, 1920

No.	C. M. P.	Lat.	H	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1774	Nov. 27.8	−11	19	*αp*															
1777	Dec. 1.8	− 9	28	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*x*								
1778	Nov. 29.3	−11	7		*β*	*βp*	*x*	*x*											
1779	Dec. 13.3	−11	18							*x*	*αp*	*αp*	*αp*	*βp*	*βp*	*βp*	*αp*		
1780	18.4	−10	15												*x*	*αp*	*β*		
1781	16.4	−12	7													*x*	*βp*		
				2	2	2	2	2	1	2	2	1	1	1	2	3	3	.....	

No.	C. M. P.	Lat.	H	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1779	Dec. 13.3	−11	18			*x*													
1780	18.4	−10	15		*x*	*x*													
1782	21.8	+15	14		*βp*	*β*		*x*	*βf*	*βf*	*αf*	*αf*	*αf*	*αf*					
1783	17.9	+14	22		*x*	*β*		*x*	*β*	*βp*	*x*								
1784	23.0	− 7	14			*β*		*x*	*βf*	*β*	*β*	*β*	*βp*	*β*	*β*	*β*			
1785	26.1	+ 9	28					*x*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*	*αp*
1786	30.0	−12	26								*x*	*α*	*βp*	*βf*	*βf*	*βp*	*βp*	*βp*	*βp*
1787	30.8	+19	19										*β*	*βf*	*β*	*β*	*βf*	*β*	*βf*
1788	28.1	+ 9	4													*αf*			
1789	31.7	+12	6														*α*		
1790	Jan. 5.3	− 7	23															*x*	*βp*
				.....	3	5	.....	4	4	4	5	4	5	5	4	5	4	4	4

NOTES.

No. 1778 A revival of No. 1775.
No. 1779 This spot was not present on Nov. 17, but the photoheliogram showed faculae in the region.
No. 1782 The preceding members of this group died out, leaving a unipolar negative spot in the northern hemisphere.
No. 1788 A small negative spot in the northern hemisphere. The photoheliogram shows a very faint preceding spot.
No. 1789 A small negative spot in the northern hemisphere. The calcium flocculi connected with this spot were directly south of it. On the photoheliogram a very faint marking was north preceding but there is some doubt about its being a companion spot.